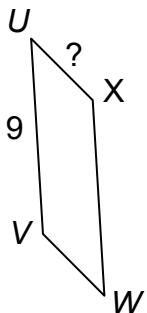
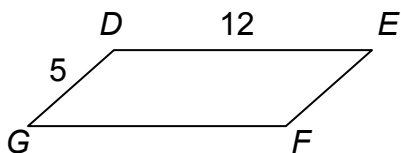




- 1 Parallelogram  $DEFG$  is similar to parallelogram  $VUXW$ .



What is the length of  $\overline{UX}$ ?

- A 21.6  
B 8  
C 3.75  
D 2
- 2 James saves \$18 in 4 weeks. At this rate, how long will it take him to save \$99?
- A 20 weeks  
B 22 weeks  
C 72 weeks  
D 396 weeks

- 3 If one inch is approximately 2.54 centimeters, which of the following proportions could be used to find the approximate number of centimeters in 12 inches?

A  $\frac{1}{2.54} = \frac{12}{x}$

B  $\frac{1}{2.54} = \frac{x}{12}$

C  $\frac{1}{12} = \frac{x}{2.54}$

D  $\frac{1}{x} = \frac{2.54}{12}$

- 4 Mark bought a 12-pack of bottled water for \$3.60. Which equation can be used to find  $c$ , the cost of a 24-pack of bottled water?

A  $c = 12(3.60)$

B  $c = 12(0.30)$

C  $c = 24(0.30)$

D  $c = 24(3.60)$



- 5 A scale on a map states that 1 inch equals an actual distance of 110 miles. Which proportion could be used to find the distance between two cities that are 2.5 inches apart on a map?

A  $\frac{1}{110} = \frac{x}{2.5}$

B  $\frac{1}{110} = \frac{2.5}{x}$

C  $\frac{1}{x} = \frac{2.5}{110}$

D  $\frac{1}{2.5} = \frac{x}{110}$

- 6 Gabby used  $2\frac{1}{2}$  cups of sugar to make 36 cookies. How many cups of sugar will she need to make 126 cookies?

A  $3\frac{1}{2}$  cups

B  $8\frac{3}{4}$  cups

C 10 cups

D 16 cups

- 7 Theresa bought a 5-pound bag of grapefruit for \$3.75. Which procedure can she use to determine the cost of an 8-pound bag of grapefruit?

A Divide 3.75 by 5 then multiply the quotient by 8.

B Multiply 3.75 by 5 then multiply the product by 8.

C Divide 3.75 by 8 then multiply the quotient by 5.

D Multiply 5 by 8 then divide the product by 3.75.

- 8 Which equation could be used to find  $f$ , the number of feet in  $y$  yards?

A  $f = y + 3$

B  $f = \frac{1}{3}y$

C  $f = 3y$

D  $f = 3 - y$



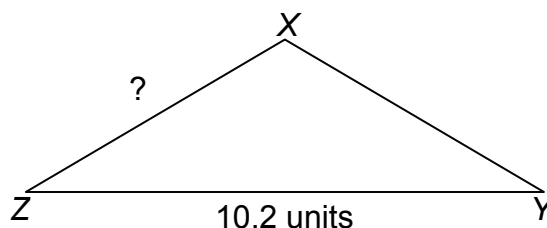
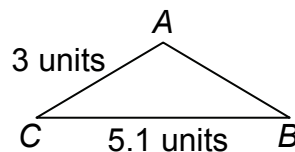
- 9 Jennifer wants to enlarge a rectangular picture. The picture is 7 inches wide and 10.5 inches long. If Jennifer wants the enlargement to be 17.5 inches wide, what will be the length of the enlargement?

A 14 inches  
B 20.5 inches  
C 21 inches  
D 26.25 inches

- 10 A brick mason can lay an average of 125 bricks in an hour. At this rate, approximately how long will it take him to lay 600 bricks?

A 2 hours  
B 4 hours  
C 5 hours  
D 8 hours

- 11 Triangle  $ABC$  is similar to triangle  $XYZ$ .



What is the length of  $\overline{XZ}$ ?

A 5 units  
B 6 units  
C 8.1 units  
D 17.34 units